

AMENDMENTS TO THE CLAIMS

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-25 (cancelled)

26. (Currently Amended) A tool for surgery of a joint, the tool comprising:

a first component having a surface for engaging a substantially uncut joint surface, the surface conforming to and being substantially a negative of the uncut joint surface; and

a block that communicates with the first component; and

at least one guide in the block and/or the first component, the guide for directing a surgical instrument, wherein ~~the shape and/or position of at least one of the block and the guide is~~ has a predetermined position relative to the conforming surface and is fixed at a predetermined orientation from ~~referenced to, at least in part,~~ at least one of an anatomical axis and a biomechanical axis associated with said joint.

27. (Previously Presented) The tool of claim 26 wherein the first component and the block are integrally formed.

28. (Previously Presented) The tool of claim 26 wherein the surface of the first component has a convex portion.

29. (Previously Presented) The tool of claim 26 wherein the first component has at least one guide positioned below the at least one guide in the block.

30. (Previously Presented) The tool of claim 26 wherein at least one of the first component and the block have a plurality of guides therein.

31. (Previously Presented) The tool of claim 30 wherein a first guide of a plurality of guides is configured at an angle to a second guide of a plurality of guides.
32. (Previously Presented) The tool of claim 26 wherein the first component has at least one stabilizer on the surface that engages the joint surface.
33. (Previously Presented) The tool of claim 32 wherein the stabilizer is selected from the group consisting of pin, peg, post, and nub.
34. (Previously Presented) The tool of claim 26 wherein a surface of the first component that communicates with a surface of the block is configured to prevent at least one movement selected from the group consisting of axial, lateral and rotational.
35. (Previously Presented) The tool of claim 34 wherein the surface of the block that engages the first component is at least one of convex or concave.
36. (Previously Presented) The tool of claim 34 wherein the surface of the first component that engages the block is at least one of convex or concave.
37. (Previously Presented) The tool of claim 26 wherein the surface of at least one of the first component and block has an aperture for receiving at least one of a pin, post and peg located on a surface of the first component.
38. (Currently Amended) The tool of claim 37 wherein the aperture forms a groove ~~providing~~ preventing rotational movement.
39. (Currently Amended) The tool of claim 26 ~~37~~ wherein the first component is selected from a library of components.
40. (Cancelled)

41. (Currently Amended) The tool of claim 26 ~~36~~ wherein at least one of the first component and block has a reaming aperture.

42. (Previously Presented) The tool of claim 26 or 27 further comprising spacers.

43. (Currently Amended) The tool of claim 26 ~~36~~ wherein the block engages the first component in a snap fit.

44. (Previously Presented) The tool of claim 26 or 27 configured to be used in at least one of hip, knee, ankle, shoulder, elbow and wrist.

Claims 45-66 (Cancelled)

67. (Previously Presented) The tool according to claim 26 or 27, wherein the at least one of an anatomical axis and a biomechanical axis includes an anatomic axis.

68. (Previously Presented) The tool according to claim 26 or 27, wherein the at least one of an anatomical axis and a biomechanical axis includes a biomechanical axis.

69. (Previously Presented) The tool according to claim 26 or 27, wherein the surface has a concave portion.

70. (Previously Presented) The tool according to claim 26 or 27, wherein the surface has a flat portion.

71. (Previously Presented) The tool according to claim 26 or 27, wherein the surface has concave and convex portions.

72. (Previously Presented) The tool according to claim 26 or 27, wherein the joint surface includes portions of at least one of a medial condyle and a lateral condyle.

73. (Previously Presented) The tool according to claim 26 or 27, wherein the joint surface includes portions of at least one of a medial tibial plateau and a lateral tibial plateau.

74. (Previously Presented) The tool according to claim 26 or 27, wherein said joint surface includes cartilage.

75. (Currently Amended) The tool according to claim 26 or 27, wherein said joint surface includes at least one of bone and subchondral bone.

76. (Previously Presented) The tool according to claim 26 or 27, wherein the guide is dimensioned to control drill depth.

77. (Previously Presented) The tool according to claim 26 or 27, wherein the guide includes a metal insert.

78. (Previously Presented) The tool according to claim 26, further comprising attachment means for attaching the block to the first component.

79. (Currently Amended) The tool according to claim 26, further comprising an adjustment mechanism for adjusting the position of the guide relative to the joint surface ~~block relative to the first component~~.

80. (Currently Amended) The tool according to claim 79, wherein the adjustment mechanism includes at least one of a tensiometer, a spacer, a shim, a hinge device, a jack device, and a ratchet device.

Claims 81-97 (Cancelled)

98. (Previously Presented) The tool according to claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with the hip.

99. (Previously Presented) The tool according to claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with the ankle.

100. (Previously Presented) The tool of claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with a femoral condyle and/or a femur.

101. (Previously Presented) The tool of claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with a tibial plateau and/or a tibia.

102. (Previously Presented) The tool of claim 26, wherein the first component is one of a mold and a machined part.

103. (Previously Presented) The tool of claim 79, wherein said adjustment mechanism includes adjustment means for optimizing at least one of flexion gap, extension gap, flexion, extension, abduction, adduction, internal rotation, and external rotation.

104. (Previously Presented) The tool of claim 79, wherein said adjustment mechanism includes adjustment means for optimizing balance of the joint.

Claims 105-108 (Cancelled)

109. (Currently Amended) The tool of claim 79, wherein said adjustment mechanism allows for ~~includes adjustment means for~~ optimizing at least one of flexion gap, extension gap, flexion, extension, abduction, adduction, internal rotation, and external rotation.

110. (Currently Amended) The tool of claim 79, wherein said adjustment mechanism allows for ~~includes adjustment means~~ allows for optimizing balance of the joint.

111. (New) The tool of claim 26, wherein the guide is fixed in position relative to the conforming surface.

112. (New) The tool according to claims 26 or 27, wherein the joint is a tibia, and wherein the guide has a shape and/or position such that when the surface of the first component engages the joint surface, the guide directs movement of the surgical instrument into making a cut at a predetermined slope relative to the sagittal plane.

113. (New) The tool according to claim 112, wherein said cut is made relative to at least one of a mechanical axis and an anatomic axis of the tibia.

114. (New) The tool according to claim 112, wherein said slope is between 0 and 7 degrees.

115. (New) The tool according to claim 112, wherein the slope matches the normal slope of the tibia.

116. (New) The tool according to claims 26 or 27, wherein at least a portion of the tool is adapted to rest on the tibia plateau prior to directing movement of the surgical instrument.

117. (New) The tool according to claim 26, wherein the uncut joint surface includes diseased cartilage.

118. (New) The tool according to claims 26 or 27, wherein at least one guide is oriented at an angle to a second guide.

- 119. (New) The tool of claim 26, wherein said surface conforms to cartilage.
- 120. (New) The tool of claim 119, wherein said cartilage is normal.
- 121. (New) The tool of claim 119, wherein said cartilage is diseased.
- 122. (New) The tool of claim 119, wherein said cartilage is normal and diseased.
- 123. (New) The tool of claim 26, wherein said surface conforms to subchondral bone.
- 124. (New) The tool of claim 26, wherein said surface conforms to both cartilage and subchondral bone.
- 125. (New) The tool according to claim 112, wherein at least a portion of the tool is adapted to rest on the tibia plateau prior to directing movement of the surgical instrument.
- 126. (New) The tool of claim 125, wherein said surface conforms to cartilage.
- 127. (New) The tool of claim 126, wherein said cartilage is normal.
- 128. (New) The tool of claim 126, wherein said cartilage is diseased.
- 129. (New) The tool of claim 126, wherein said cartilage is normal and diseased.
- 130. (New) The tool of claim 125, wherein said surface conforms to subchondral bone.
- 131. (New) The tool of claim 125, wherein said surface conforms to both cartilage and subchondral bone.

132. (New) The tool according to claims 26 or 27, wherein the joint is a tibia, and wherein the guide has a shape and/or position such that when the surface of the first component engages the joint surface, the guide directs movement of the surgical instrument into making a cut on the tibial plateau so as to substantially balance the knee.

133. (New) The tool according to claim 132, wherein the guide has a shape and/or position such that when the surface of the first component engages the joint surface, the guide directs movement of the surgical instrument into making the cut at a predetermined slope relative to the sagittal plane.

134. (New) The tool according to claim 133, wherein said cut is made relative to a mechanical or anatomic axis of the tibia.

135. (New) The tool according to claim 133, wherein said tibial slope is adjusted based on the amount of damage to the knee.

136. (New) The tool according to claim 132, wherein the guide directs movement of the surgical instrument into making a cut on the tibial plateau so as to substantially balance the knee in at least one of flexion and extension.